



NAV 101

Drum Top Systems

Owners Manual

SYSTEM COMPONENTS

With all Numatic air powered drum top systems there are a variety of system configurations possible depending on the particular requirements of the application. System options are shown in the NACECARE SOLUTIONS Industrial Vacuum Systems brochure. The following describes the various components available and details relating to their use.

NAV 101 Powerhead

The NAV 101 powerhead has certain requirements with regard to air supply in order to operate effectively. Variations from air supply specifications will result in different levels of performance.

NAV 101 Air Supply Requirements

The minimum requirements are:

- 45 cfm of inlet air volume on 1/2" air line at 80 psi
- 15 Hp compressor

Given these minimum requirements the unit should produce 100" of static lift and 100 cfm of airflow for vacuuming operations.

Care should be taken to ensure that there are no restrictions on inlet flow (such as with quick couplers) that might reduce the volume of air to the head. This will affect performance. Each unit is provided with a 1/2" ball valve to control the air supply and thus the induced vacuum.

Dry Filters

The drum top systems can be provided with various dry filters such as:

- Permatex - white synthetic filter for basic dry applications
- Fibratex - white rubber coated needlefelt filter for high volume dust & fine dust applications
- Microtex - yellow synthetic filter for high level filtration & motor protection

Optional HEPA Filter Module

As an optional accessory, the drum top systems may be fitted with a HEPA filter module. This is a yellow steel module c/w microfilter cartridge for hazardous dust applications. When this filter is used it must always be used with a Permatex filter as a pre-filter. Failure to do so will drastically reduce the working life of the HEPA filter.

As a safety precaution in sensitive areas, it is possible to secure the HEPA filter module to the powerhead by using split pins. These can be inserted through the holes in the steel retaining toggles once they are closed.

The HEPA filter is capable of filtration to 99.97% even if the intake of the machine is completely blocked.

The code for the replacement filter is NVM 25B. Replacement of the HEPA filter must be carried out by qualified personnel.

Optional Wet Filter Assembly

The drum top systems may be fitted with a wet filter. This assembly includes a float ball which rises up when fluid levels reach the maximum capacity of the vacuum tank. When this occurs the unit should be turned off and the container emptied.

If the machine is to be used with the optional HEPA filter module in a wet application, it is essential that a secondary Permatex dry filter assembly is used. Otherwise the working life of the HEPA filter will be drastically reduced.

Optional Oil Arresting Module

This assembly is used to arrest oil that is being vacuumed and preventing it from being expelled through the exhaust of the NAV 101 powerhead. It is important that this be assembled correctly for proper operation.

- 1- place the loose round filter on the top (inside) the wet filter assembly
- 2- install the oil arresting module itself on top of the wet filter assembly
- 3- install the Permatex dry filter on top of the oil arresting module
- 4- place the NAV 101 powerhead on top

As oil is picked-up with the vacuum system, the majority of the oil will impact and remain on the loose round filter or drain back into the vacuum tank. Smaller quantities will penetrate and enter the oil arresting module. After the unit has been in service for a while, oil will tend to migrate through the system and penetrate through to the Permatex dry filter. This filter should be checked periodically and if there is substantial penetration the rfilter pads in the system should be removed and cleaned or replaced. The two filter pads in the module can be accessed by removing the 6 screws on the base of the module. The inside of the oil module should also be cleaned at that time.

Accessories

NAV 101 drum top systems are equipped with a reducer on the intake to allow the use of all standard 1 1/2" and 2" Numatic accessories. If the 3" accessories are required, the reducer can be removed by lifting the retaining pin and sliding out the reducer. The 3" steel hose collar will then fit into the intake of the vacuum

WARNINGS

If used for any potentially hazardous or health endangering material recovery, do not use the machine unless the full filtration system is fitted. Failure to fit the complete system may cause premature clogging of the HEPA filter cartridge

Do not use the machine in corrosive or flammable environments.

Do not use this machine for the collection of explosive dusts.

When operating the machine in contaminated environment, always use protective respiratory equipment and suitable approved personal protective clothing.

IMPORTANT

This machine may be equipped to handle hazardous dusts. This is only possible if fitted with a HEPA filter module. Always take caution when emptying the machine as the dust found in the container may be hazardous to your health.

Servicing

Any servicing required should be carried out by qualified personnel.

Do not attempt to clean the microfilter cartridge. If it becomes excessively clogged, fit a new unit. Take care when fitting the new cartridge not to handle or rupture the paper element as this will affect the filtration efficiency of the machine. Care should also be used in disposing of the old cartridge.

Always use genuine Numatic parts for any repairs required.

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